

Abstract of the Disclosure

A fully digital camera system provides high-resolution still image and streaming video signals via a network to a centralized, server supported security and surveillance system. The digital camera for collects an image from one or more image transducers, compressing the image and sending the compressed digital image signal to a receiving station over a digital network. A plurality of image transducers or sensors may be included in a single camera unit, providing array imaging such as full 360 degree panoramic imaging, universal or spherical imaging and field imaging by stacking or arranging the sensors in an array. The multiple images are then compressed and merged at the camera in the desired format to permit transmission of the least amount of data to accomplish the desired image transmission. The camera also employs, or connects to, a variety of sensors other than the traditional image sensor. Sensors for fire, smoke, sound, glass breakage, motion, panic buttons, and the like, may be embedded in or connected to the camera. Data captured by these sensors may be digitized, compressed, and networked to detect notable conditions. An internal microphone and associated signal processing system may be equipped with suitable signal processing algorithms for the purpose of detecting suitable acoustic events and their location. In addition, the camera is equipped with a pair of externally accessible terminals where an external sensor may be connected. In addition, the camera may be equipped with a short-range receiver that may detect the activation of a wireless 'panic button' carried by facility personnel. This 'panic button' may employ infrared, radio frequency (RF), ultrasonic, or other suitable methods to activate the camera's receiver.